

ADVANCES OF ADHESION SCIENCE TRAINING SCHOOL 2

21th - 24th March 2017, IPF Dresden

21st March 2017

Day 1: INTERACTIVE MATERIALS: NEW CHEMISTRY AND POLYMERS ON SURFACES AND INTERFACES

08:30 – 09:00 Registration

Session I: Materials Design

09:00 - 09:30 **Welcome and update/state-of-the art of BioSmartTrainee**
Andreas Fery and Alla Synytska, IPF Dresden, Germany

09:30 - 10:10 **Nanostructured responsive and adaptive surfaces based on polymer brushes**
Harm-Anton Klok, EPFL, Lausanne, Switzerland

10:10 - 10:50 **Polyelectrolytes towards interface modification**
Marleen Kamperman, WU, Netherlands

10:50 - 11:10 *Coffee Break*

11:10 - 12:10 **Presentation research project by ESRs**
ESR 1: Marjolein Sliepen, IPF Dresden, Germany
ESR 3: Marco Dompé, WU, Netherlands

12:10 - 13:20 *Lunch*

Session II: Bio- and Bio-inspired Adhesion

13:20 - 14:00 **Dynamic bio-interfaces**
Aránzazu del Campo Bécares, INM Saarbrücken, Germany

14:00 - 14:40 **Bio-inspired design of polymeric materials – “springtails”**
Carsten Werner, IPF Dresden, Germany

14:40 - 15:20 **Mussel-inspired wet adhesives**
Phillip Messersmith, University California, USA

15:20 - 16:20 **Presentation research project by ESRs**
ESR 6: Vaishali Chopra, INM Saarbrücken, Germany
ESR 5: Mehdi Vahdati, CNRS/ESPCI, France

16:20 - 18:00 *Coffee and Discussions*

19:30 *Dinner (Kurfürstenschänke, An der Frauenkirche 13, 01067 Dresden)*

22nd March 2017

Day 2: MULTI-SCALE MECHANICS PROBLEMS AND ADHESION MECHANISMS

Session III: Adhesive mechanisms and dynamics and flow at interfaces

9:00 - 9:40 **Biomechanics of animal adhesion in wet environments**

Walter Federle, CAM, UK

9:40 - 10:20 **Fluid mechanical aspects of adhesion on wet surfaces**

Anton Darhuber, TU/e, Netherlands

10:20 - 10:40 *Coffee Break*

10:40 - 11:20 **Atomistic modeling, Theory of polymers at interfaces under equilibrium and non-equilibrium conditions**

Holger Merlitz, IPF Dresden, Germany

11:20 - 12:00 **Mechanics in soft materials, CP**

Andreas Fery, IPF Dresden, Germany

12:00 - 13:00 *Lunch*

13:00 - 15:00 **Presentation research project by ESRs**

ESR 9: Maciej Chudak, TU/e, Netherlands

ESR 10: Dimitris Mintis, UPATRAS, Greece

ESR 8: Ki Woong (Victor) Kang, CAM, UK

ESR 4: Francisco J. Cedano, CNRS/ESPCI, France

15:00 - 16:00 *Coffee and Discussions*

Session IV: Training elements: scientific (Fellows)

16:00 - 18:00 **Training in AFM CP technique for ESRs**

(short course given by PhD students from IPF, Fellows will be divided in 2 groups)

Parallel Session: Administrative Meeting (Supervisors)

16:00 - 18:00 **BioSmartTrainee administrative aspects**

Sandra Martinka

19:30 *Guided Sightseeing walking Tour (1h)*

(Meeting Point: Kurfürstenschänke, An der Frauenkirche 13, 01067 Dresden)

23rd March 2017

DAY 3: ADVANCED ADHESIVES AND INDUSTRIAL MATERIALS DESIGN

Session V: Industrial Materials Design

09:00 - 09:40 **Industrial design and technological applications**

Matthias Gerst, BASF, Germany

09:40 - 10:20 **Adhesion control in Decorative Paints**

Phil Taylor, Akzonobel/ICI, UK

10:20 - 10:40 *Coffee Break*

10:40 - 11:20 **Adhesion challenges in dressings**

Stéphane Auguste, URGO, France

11:20 - 12:50 **Presentation research project by ESRs**

ESR 7: Justine Tavera, BASF, Germany

ESR 11: Aurélie Féat, Akzonobel/ICI, UK

ESR 2: Maria Villiou, INM Saarbrücken, Germany

12:50 - 13:50 *Lunch*

Session VI: Training elements I

13:50 - 16:30 **Writing of manuscripts**

Costantino Creton, CNRS/ESPCI, France

Semperopera, Ballet starts at 19:00

(your reserved and self-paid tickets at Semperopera's box office – 6 pm)

24th March 2017

Day 4: TRAINING ELEMENTS

Session VI: Training elements II

09:00 - 10:20 **Making a good presentation – Part 1.**

Silvia Scheinert

10:20 - 10:40 *Coffee Break*

10:40 - 12:50 **Making a good presentation – Part 2.**

Silvia Scheinert

12:50 - 13:50 *Lunch*

13:50 - 15:30 **Patenting and Licensing**

Matthias Knöbel

15:30 - 16:00 **Concluding remarks**

OVERVIEW DAY'S SCHEDULE



2017					
time line	21st March	22nd March	23rd March	24th March	
8:30-9:00	Registration				
9:00-9:10	Welcome	Lecture W. Federle	Lecture M. Gerst	Making a good presentation S. Scheinert	
9:10-9:20					
9:20-9:30					
9:30-9:40					
9:40-9:50	Lecture H.-A. Klok	Lecture A. Darhuber	Lecture P. Taylor	Making a good presentation S. Scheinert	
9:50-10:00					
10:00-10:10	Lecture M. Kamperman	coffee break	coffee break		Making a good presentation S. Scheinert
10:10-10:20					
10:20-10:30	coffee break	Lecture H. Merlitz	Lecture S. Auguste	Making a good presentation S. Scheinert	
10:30-10:40					
10:40-10:50	PhD-IPF: M. Slieden	Lecture A. Fery	PhD-BASF: J. Tavera		Making a good presentation S. Scheinert
10:50-11:00					
11:00-11:10	PhD-WU: M. Dompé	Lunch	PhD-ICI: A. Féat	Making a good presentation S. Scheinert	
11:10-11:20					
11:20-11:30	Lunch	PhD-TU/e: M. Chudak	Lunch		Lunch
11:30-11:40					
11:40-11:50	Lecture A. Del Campo	PhD-UPATRAS: D. Minits	Writing of manuscripts C. Creton	Patenting and Licensing Part I M. Knöbel	
11:50-12:00					
12:00-12:10	Lecture C. Werner	PhD-CAM: K.W. (Victor) Kang	Writing of manuscripts C. Creton		Patenting and Licensing Part I M. Knöbel
12:10-12:20					
12:20-12:30	Lecture P. Messersmith	PhD-ESPCI: F. J. Cedano	Writing of manuscripts C. Creton	Patenting and Licensing Part I M. Knöbel	
12:30-12:40					
12:40-12:50	PhD-INM: V. Chopra	coffee break	Writing of manuscripts C. Creton		Patenting and Licensing Part I M. Knöbel
12:50-13:00					
13:00-13:10	PhD-ESPCI: M. Vahdati	AFM CP Training (Fellows)	Administrative Aspects (Supervisors)	Patenting and Licensing Part I M. Knöbel	
13:10-13:20					
13:20-13:30	coffee break and open discussion	AFM CP Training (Fellows)	Administrative Aspects (Supervisors)		Patenting and Licensing Part I M. Knöbel
13:30-13:40					
13:40-13:50	Dinner (Kurfürstenschänke)	Sightseeing (meeting point: Kurfürstenschänke)	Semperoper (self-payment)	Patenting and Licensing Part I M. Knöbel	
13:50-14:00					
14:00-14:10	Dinner (Kurfürstenschänke)	Sightseeing (meeting point: Kurfürstenschänke)	Semperoper (self-payment)		Patenting and Licensing Part I M. Knöbel
14:10-14:20					
14:20-14:30	Dinner (Kurfürstenschänke)	Sightseeing (meeting point: Kurfürstenschänke)	Semperoper (self-payment)	Patenting and Licensing Part I M. Knöbel	
14:30-14:40					
14:40-14:50	Dinner (Kurfürstenschänke)	Sightseeing (meeting point: Kurfürstenschänke)	Semperoper (self-payment)		Patenting and Licensing Part I M. Knöbel
14:50-15:00					
15:00-15:10	Dinner (Kurfürstenschänke)	Sightseeing (meeting point: Kurfürstenschänke)	Semperoper (self-payment)	Patenting and Licensing Part I M. Knöbel	
15:10-15:20					
15:20-15:30	Dinner (Kurfürstenschänke)	Sightseeing (meeting point: Kurfürstenschänke)	Semperoper (self-payment)		Patenting and Licensing Part I M. Knöbel
15:30-15:40					
15:40-15:50	Dinner (Kurfürstenschänke)	Sightseeing (meeting point: Kurfürstenschänke)	Semperoper (self-payment)	Patenting and Licensing Part I M. Knöbel	
15:50-16:00					
16:00-16:10	Dinner (Kurfürstenschänke)	Sightseeing (meeting point: Kurfürstenschänke)	Semperoper (self-payment)		Patenting and Licensing Part I M. Knöbel
16:10-16:20					
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16:30-16:40					
16:40-16:50	Dinner (Kurfürstenschänke)	Sightseeing (meeting point: Kurfürstenschänke)	Semperoper (self-payment)		Patenting and Licensing Part I M. Knöbel
16:50-17:00					
17:00-17:10	Dinner (Kurfürstenschänke)	Sightseeing (meeting point: Kurfürstenschänke)	Semperoper (self-payment)	Patenting and Licensing Part I M. Knöbel	
17:10-17:20					
17:20-17:30	Dinner (Kurfürstenschänke)	Sightseeing (meeting point: Kurfürstenschänke)	Semperoper (self-payment)		Patenting and Licensing Part I M. Knöbel
17:30-17:40					
17:40-17:50	Dinner (Kurfürstenschänke)	Sightseeing (meeting point: Kurfürstenschänke)	Semperoper (self-payment)	Patenting and Licensing Part I M. Knöbel	
17:50-18:00					
18:00-18:10	Dinner (Kurfürstenschänke)	Sightseeing (meeting point: Kurfürstenschänke)	Semperoper (self-payment)		Patenting and Licensing Part I M. Knöbel
18:10-18:20					
18:20-18:30	Dinner (Kurfürstenschänke)	Sightseeing (meeting point: Kurfürstenschänke)	Semperoper (self-payment)	Patenting and Licensing Part I M. Knöbel	
18:30-18:40					
18:40-18:50	Dinner (Kurfürstenschänke)	Sightseeing (meeting point: Kurfürstenschänke)	Semperoper (self-payment)		Patenting and Licensing Part I M. Knöbel
18:50-19:00					
19:00-19:10	Dinner (Kurfürstenschänke)	Sightseeing (meeting point: Kurfürstenschänke)	Semperoper (self-payment)	Patenting and Licensing Part I M. Knöbel	
19:10-19:20					
19:20-19:30	Dinner (Kurfürstenschänke)	Sightseeing (meeting point: Kurfürstenschänke)	Semperoper (self-payment)		Patenting and Licensing Part I M. Knöbel
at 19:30					



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